



Nuclear Safety Committee

Meeting Minutes

Date: 30 June 2017

Location: Wattle Room, 38-40 Urunga Parade Miranda

Chair: Dr Tamie Weaver

Members: Dr Carl-Magnus Larsson; Mr Christopher Tola; Mr Tony Irwin; Dr Rob Lee; Mr Robert Lyon; Mr Don MacNab; Dr Peter Karamoskos; Mr Ian Drinnan; Mr Peter Wilkinson; Ms Kerrie-Anne Christian

Secretariat: Mr John Ward

Scribe: Ms Meaghan Partridge

Apologies: Dr Peter Karamoskos; Mr Ian Drinnan; Mr Tony Irwin

Invitees: Dr Samir Sarkar; Mr Vaz Mottl

Observers: Mr Jim Scott

1. Introduction

Item 1.1 Attendance and Apologies

Members were welcomed to the meeting. The apologies of Dr Karamoskos, Mr Drinnan and Mr Irwin were noted.

Item 1.2 Declaration and Potential Conflicts of Interests

No new potential conflicts were declared. Records of previously declared potential conflicts of interests are maintained by the Secretariat.

Item 1.3 Minutes of the previous meeting

Draft Minutes of the previous meeting (10 March 2017) were circulated to members out of session. Member comments were addressed and the Minutes have been agreed and published online.

Item 1.4 Meeting dates

The following meeting dates were confirmed:

- 20 October 2017
- 16 March 2018
- 22 June 2018

Item 1.5 Safety/Security Moment

ARPANSA presented a safety/security moment on safety communication, using the recent Licence Holder Forum held in Canberra as an example. The Forum was attended by well over 100 representatives of licence holders. The program included a presentation on the history and evolution of safety and radiation protection for planned exposure situations, now enshrined in RPS C-1 *Radiation Protection in Planned Exposure Situations* published in 2016. Issues surrounding its practical implementation and implications for safety were discussed by a panel of licence holders, interacting with the audience.

Feedback has shown that licence holders consider the forum to be an excellent way to network and share information on safety, as well as for ARPANSA to promote important safety messages and liaise with licence holders in an open and transparent manner. ARPANSA will continue to advise committee members of Licence Holder Forums and enable members to attend at their own discretion and cost, subject to their availability and capacity of the venue.

Action: *ARPANSA to provide information on the Planned Exposure Code to NSC at the meeting on 20 October.*

2. Business Arising

Item 2.1 Outstanding Actions

The Committee noted that all outstanding actions were completed.

Item 2.2 Radioactive Waste Management Facility Guide and Information for Stakeholders

The Committee were provided with an update on the Regulatory Guide: *Applying for a licence for a radioactive waste storage or disposal facility* and the accompanying information document; *Radioactive waste storage and disposal facilities – information for stakeholders*. The information document is not a “guide” but clearly and effectively states ARPANSA’s objectives and international best practice principles for safety and protection that are relevant for waste management facilities. Both documents are available on the ARPANSA website at <https://www.arpansa.gov.au/Regulation/waste>. The Committee was also informed of outreach activities performed by ARPANSA in South Australia so far and preliminary plans for the future.

The Waste Guide and the National Radioactive Waste Management Facility (NRWMF) proposal were discussed. The Committee noted that the proposal as it currently stands does not cover disposal of intermediate level waste. Noting that the ANM facility will generate intermediate level waste, the CEO of ARPANSA will need to consider the final stage of management of this waste in making his decision on the ANM operating licence application.

The Committee observed that Section 3.1 (page 13) of the information document, regarding interdependencies (i.e. how specific decisions on waste management options affect different safety features during the full life-cycle management of waste), might require clarification. ARPANSA will review to determine if this element needs expansion.

Action: *Document Radioactive Waste Storage and Disposal Facilities – Information for Stakeholders to be reviewed to determine if interdependencies are adequately described.*

3. Correspondence

Item 3.1 Incoming Correspondence

None

Item 3.2 Outgoing Correspondence

The Committee noted the outgoing letter from ARPANSA to Dr Adi Paterson, CEO of ANSTO, expressing the Committee's and ARPANSA's thanks for ANSTO's facilitation of the visit to the ANSTO Nuclear Medicine (ANM) Facility under construction, on 10 March 2017.

4. Main Items for Discussion

Item 4.1 Committee Member Appointments

The Committee noted that the memberships of the current NSC members will expire on 31 December 2017. The Committee was provided with an overview of the process for upcoming nominations and appointments.

5. Update on major Controlled Facilities and Inspections

Item 5.1 OPAL

The Committee was updated on the ANSTO OPAL Reactor performance since the previous meeting in March 2017, and in particular on the outcomes of an event from November 2015 concerning a deviation from the requirements of a criticality certificate, which had initially been discussed in the June 2016 meeting. ARPANSA received the investigation report in May 2016 and found it to be comprehensive with a number of human and organisational factors being included. ARPANSA has also been monitoring the closure of corrective actions.

The Committee discussed the arrangements around nuclear material management at ANSTO, focusing on the scope of responsibilities of the ANSTO Criticality Officer, particularly in regard to the review and alignment of operational instructions with the criticality certificate. While this event had no significant safety impact, the Committee noted that the deviation had gone unnoticed for a prolonged period. The Committee discussed the importance of organisational controls around the implementation of approved processes based on documented risk assessments and with the direct involvement of the ANSTO criticality officer in ensuring that procedures and actual work practices are consistent with the criticality certificate.

No further regulatory issues or concerns were raised among Committee members.

Item 5.2 Relevant Change to the ANSTO SyMo Facility

The Committee was updated on the ANSTO SyMo Facility for treatment of liquid intermediate level waste resulting from the proposed new ANM Facility, including the progress of a Regulation 51 request relating to changes in the plant configuration and process. Changes include increases to the size of some hot cells and a straightening of their layout to improve flexibility and allow future expansion. Some processes have been consolidated into single cells and some design changes have been made to cell shield doors. Whilst the

functionality of the process is essentially unchanged a number of equipment positions have been relocated to better suit process flow and maintenance.

No significant issues or concerns were raised among Committee members.

Item 5.3 ANM Operating Licence Application

ARPANSA received a licence application to operate the ANSTO Nuclear Medicine (A0309) on 7 April 2017. The Committee had previously received an update on the progress of the application and a copy of ANSTO's Operational Risk Assessment, with a request that Committee Members review the risk assessment ahead of the meeting.

The Committee commented that the risk assessment was based around a series of scenarios and did not include a list of hazards and associated controls. The risk assessment does not demonstrate an evaluation of risk control effectiveness and contains unsupported assertions. The Committee noted the need to include frontend workforce involvement in regard to the human factors relating to operation. The appendix of categories does not include the definition of terms such as "incredible".

The Committee offered to provide ARPANSA with a list of questions and requests for clarification to assist ARPANSA in its review of the risk assessment.

Action: Committee Members to provide input for informal advice to the Chair within two weeks, and the Chair to forward an email providing informal advice on the questions raised by Committee members.

6. Reports

Item 6.1 ARPANSA Significant Activities

The Committee was provided with an update on significant ARPANSA activities. This included: planning for the upcoming self-assessment for the Regulatory Performance Framework (RPF) to be held at the end of July; a Licence Holder Forum held on 28 June 2017; progress on the preparations towards a 2018 IAEA Integrated Regulatory Review Service mission; progress on ARPANSA publications; and IAEA coordinated Emergency ConvEx 3.

The Committee was informed that Ministerial approval had been given for it to act in the role of External Validator for the RPF self-assessment report. The report would be provided to the Committee by 20 September to allow time for comments to be compiled and actioned before the NSC meeting of 20 October 2017.

Item 6.2 Convention on Nuclear Safety Outcomes

The Seventh Review Meeting of the Contracting Parties to the Convention on Nuclear Safety was held from 27 March to 7 April 2017 at the IAEA Headquarters in Vienna, Austria.

Three ARPANSA staff attended, including the Deputy CEO, Dr Gillian Hirth, who led the Australian Delegation, and Dr Samir Sarkar, who provided the Committee with a brief overview of the Review Meeting.

The list of the four “good performances” awarded to Australia are as follows:

Area of Good Performance 1:

Implementation of a Quality Management System to ISO 17020:2012

Area of Good Performance 2:

The collaborative agreement with operators of the SAFARI-1 reactor (South Africa) and the High Flux Reactor (The Netherlands), with the aim to work together to increase safety and reliability through cooperation.

Area of Good Performance 3:

Introduction of the Regulatory Delivery Model, which includes:

- New targeted risk informed inspection program
- Performance Objectives and Criteria for inspections – includes Safety Culture
- Holistic safety.

Area of Good Performance 4:

Implementation of the Regulator Performance Framework Annual Self Review, using a process of peer review with international counterparts, as well as the stakeholders.

Item 6.3 Radiation Health Committee

The Committee was provided a summary of the recent activities of the Radiation Health Committee including IRRS Mission to Australia; Plan for NDRP amendment 8; and ARPANSA publications – including the Medical Exposure Code; Existing Exposure Guide; and Emergency Exposure Guide.

Minutes of the Radiation Health Committee will be available to download from the [ARPANSA website](#) shortly.

Item 6.4 Radiation Health and Safety Advisory Council

The Committee was provided with a summary of the recent activities of the Council, including discussion with journalists/media; IRRS Mission to Australia; Review of RPS 3; proposed code on industrial radiography licence conditions; and ARPANSA publications – including the Medical Exposure Code; Existing Exposure Guide; and Emergency Exposure Code.

Minutes of the Radiation Health Committee will be available to download from the [ARPANSA website](#) shortly.

7. Other Business

Item 7.1 Review of Roles and Expectations of Advisory Bodies

The Committee reviewed and endorsed the revised document “Roles and Expectations of Advisory Bodies”, available at [ARPANSA website](#).

Action: NSC Members to provide input regarding discussion point for interaction with RHSAC and RHC.

Action: Chair to contact Chairs of RHC & RHSAC concerning possible interactions

8. Information on Nuclear Safety Matters and Regulatory Activities

Item 8.1 Performance Indicators – Regulator Performance Framework

NSC noted the item; see further Item 6.1.

Item 8.2 Travel Reports

NSC noted the item.

Item 8.3 IAEA Draft Documents for Review

NSC noted the item.

9. Closure and Next Meeting

Next agenda to include an item on self-assessment of the past triennium noting where the Committee was successful or not, and what could be done better. This will inform the plans and activities for the next triennium, to commence 1 January 2018.

Action: *NSC members to provide topics for agenda items to the Chair via email.*

The next meeting is scheduled for Friday 20 October 2017.

Meeting was closed at 3:35 pm.